

Revenue Consultant's Report
Wilbur Smith Associates

Governor's Transportation Vision 21 Task Force

Vision 21 Task Force

Revenue Consultant Report to Task Force

Final Summary Report

Revenue
Consultant

Needs
Consultant

Analytical
Consultant

Wilbur Smith Associates

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I. PREFACE

The role of the Revenue Consultant to the Governor's Transportation Vision 21 Task Force is to develop revenue-related information that will allow the Task Force to develop a fiscally balanced, long-range multimodal transportation plan for Arizona. The development of a preferred revenue plan requires that the following items are identified and addressed:

- projected revenues for transportation from existing sources;
- potential alternative revenue sources and issues associated with them;
- candidate sources for alternative revenue packages; and
- impacts of alternative revenue packages.

The Task Force has been briefed on all the above issues through a series of written detailed progress reports. These include:

- Overview of Existing Revenue Sources, Emerging Issues and Potential Alternative Revenue Sources, July, 2000;
- Revenue Information for Hypothetical Packages, November 21, 2000;
- Hypothetical Revenue Package, December 28, 2000;
- Hypothetical Revenue Packages, February 13, 2001;
- Draft Revenue Plan, March 1, 2001; and
- Suggested Revenue Plan, March 22, 2001.

This final report supercedes the previous interim progress reports. It documents critical background material and identifies a proposed revenue plan. However, details on supporting elements can be found in the earlier documents.

ANALYSIS APPROACH

The following statements summarize the analysis approach used in the revenue assessment:

- In general, future revenues were estimated using a **conservative approach**. This is to minimize the possibility of less revenue being available than projected;
- Future revenue projections are in **constant 2000 dollars**, in order to consider the impact of inflation in the comparison of needs and revenues;

- *conservative forecasting approach*
- *revenues are in constant 2000 dollars*
- *no increases in current tax/fee structure assumed for Base Case revenues*
- *Federal, regional, State and local sources of revenue included in analysis*
- *forecasts have not been adjusted for recent economic conditions, but should remain reliable in the long run*

- Future Base Case revenue projections reflect anticipated changes in activity (i.e. population growth, changes in fuel efficiency, etc.) and **assume no changes in current taxes or fees**; and
- Future Base Case revenue projections **include Federal, regional, State and local revenues** available for transportation.

BASE CASE REVENUES

Table 1 presents a summary of projected revenue in constant 2000 dollars for the 20-year period from Fiscal Year (FY) 2001 to FY 2020. The estimate of \$41.0 billion reflects the anticipated impact of the recent alternative fuel vehicle legislation as well as the payment of debt service requirements.

Total revenue available for transportation over the next 20 years is estimated at \$41.0 billion (in constant 2000 dollars)

The modes addressed in the Needs Analysis include roadway, bus and rail, aviation, non-motorized and multimodal. In general, non-motorized and multimodal improvements are funded through the same sources as roadway projects. Therefore, the five Needs Analysis categories equate to three Revenue Analysis categories: roadway (including non-motorized and multimodal); transit (bus and rail); and aviation.

Table 1 Summary of Base Case Transportation Revenues

Future Revenue Estimates (millions of constant 2000 dollars) after Debt Service Requirements Met					
Mode	FY 2001-2005	FY 2006-2010	FY 2011-2015	FY 2016-2020	Total
Roadway	\$7,955.1	\$8,432.6	\$8,580.1	\$8,816.0	\$33,783.8
Transit	\$1,133.3	\$1,050.9	\$986.8	\$935.1	\$4,106.1
Aviation	\$846.7	\$795.5	\$771.0	\$751.1	\$3,164.3
Total	\$9,935.1	\$10,279.0	\$10,337.9	\$10,502.3	\$41,054.3

Details on the structure of existing revenue sources and the methodology for forecasting future revenues can be found in the earlier progress reports. Pertinent facts include:

- **Roadway Revenues** – Of the Federal, regional, State and local revenues available for transportation, the State's Highway User Revenue Fund (HURF) represents the primary source (62% of roadway revenues). Principal HURF sources are fuel taxes, vehicle license tax (VLT) and registration fees. Future revenue forecasts have been reduced by the amount of current debt service obligations;
- **Transit Revenues** – Transit revenue estimates reflect funds available for both capital and operating expenses from Federal, State and local sources; and

- **Aviation Revenues** – Federal (AIR-21), State (State Aviation Fund) and local (passenger facility charges) revenue sources are reflected in the forecasts. The forecasts reflect the continuation of the State Aviation Fund's 50% share of the Flight Property Tax.

REVENUE TARGET

The current estimate of total transportation needs developed by the Needs Consultant is \$61.3 billion (in constant 2000 dollars) for the period FY 2001 through FY 2020. For the purposes of this analysis, the needs are assumed to be evenly distributed across the four five-year periods. Table 2 depicts a comparison of needs and revenues by mode by period.

Table 2 Comparison of Needs and Revenues

Needs and Revenue Comparison (millions of constant 2000 dollars)						
Sources	Use	FY 2001-2005	FY 2006-2010	FY 2011-2015	FY 2016-2020	Total
Revenue From Existing Sources	Roadway	\$7,955.1	\$8,432.6	\$8,580.1	\$8,816.0	\$33,783.8
	Transit	\$1,133.3	\$1,050.9	\$986.8	\$935.1	\$4,106.1
	Aviation	\$846.7	\$795.5	\$771.0	\$751.1	\$3,164.3
	Total Revenue	\$9,935.1	\$10,279.0	\$10,337.9	\$10,502.3	\$41,054.3
Needs	Roadway	\$12,601.0	\$12,601.0	\$12,601.0	\$12,601.0	\$50,404.0
	Transit	\$1,705.0	\$1,705.0	\$1,705.0	\$1,705.0	\$6,820.0
	Aviation	\$1,027.8	\$1,027.8	\$1,027.8	\$1,027.8	\$4,111.0
	Total Needs	\$15,333.8	\$15,333.8	\$15,333.8	\$15,333.8	\$61,335.0
Additional Revenue Required to Meet Needs	Roadway	\$4,645.9	\$4,168.4	\$4,020.9	\$3,785.0	\$16,620.2
	Transit	\$571.7	\$654.1	\$718.2	\$769.9	\$2,713.9
	Aviation	\$181.0	\$232.3	\$256.8	\$276.6	\$946.7
	Total Add't Revenue Req'd	\$5,398.6	\$5,054.8	\$4,995.9	\$4,831.4	\$20,280.7

There is an anticipated \$20.3 billion difference between needs and revenues. Therefore, in order to meet the needs reflected in the \$61.3 billion estimate, an additional \$20.3 billion in revenue is required.

The 20-year needs estimate is \$61.3 billion, compared to \$41.0 billion in revenue for the same period from existing sources.

The Task Force proposed that all of the Flight Property Tax revenue should be deposited in the State Aviation Fund. Currently, only 50% of this revenue is dedicated to aviation use. In constant 2000 dollars, the 50% share equates to approximately \$126 million over 20 years. This action would reduce the \$20.28 billion revenue target to \$20.15 billion.

II. SUGGESTED REVENUE PLAN

BACKGROUND

More than 25 potential revenue sources were reviewed to identify the most appropriate elements for an overall revenue plan. Three emerged as the most appropriate sources for a \$20 billion revenue package – gas tax increase, use fuel tax increase and a statewide sales tax dedicated for transportation improvements.

The **use of fuel tax revenues is restricted**. Revenues from Highway User Revenue Fund (HURF) sources can only be used for roadway needs. **Sales tax revenue, however, is unrestricted** and can be used for any transportation need – transit, aviation or roadway.

Fuel taxes are user-based taxes, with the amount of the tax paid related to vehicle use. Sales taxes are not direct user taxes, but do reflect the linkage between transportation infrastructure or service and the benefits it provides to the overall economy of an area. Although the gas tax remains the backbone of roadway revenue, changes in fuel efficiency as well as alternative fuel types are eroding the effectiveness of this revenue source. With ever increasing needs and costs, there is the need to supplement, but not replace, vehicle-related user fees.

The Task Force favored a balanced approach. The Task Force also favored an increase in the flexibility of transportation funding. These issues led to interest in a sales tax surcharge that can be used for any or all modes. These guidelines led to the development of the suggested revenue plan. As indicated in Table 3, the principal components are phased-in gas and use fuel tax increases in addition to a phased-in statewide sales tax increase and a new statewide development fee for new residential and commercial developments. Therefore, the additional revenue required is generated through gradual increases over time, and not all at once.

Alternative Revenue Sources Considered

Existing HURF Sources

- motor vehicle fuel tax increase
- use fuel tax increase
- vehicle license tax (VLT) increase
- registration fee increase
- motor carrier tax increase (now motor carrier fee)

User-Type Alternatives

- dedicated VLT
- vehicle miles of travel (VMT) tax
- tolls/congestion pricing
- parking/tax fee
- energy tax
- alternative fuels tax
- development fees

Sales Taxes

- on motor fuels
- on motor vehicles (dedicated)
- on products and services
- general statewide surcharge
- county surcharge

Income, Property and Utility Tax

- personal income tax surcharge
- corporate income tax surcharge
- property tax
- utility fees

Financing Methods

- value capture
- public/private joint venture
- expanded HURF bonding cap

Miscellaneous

- admissions tax
- accommodations tax

Table 3 Suggested Revenue Plan

Use	Source	Action	Estimated Revenue By Time Period				20-Year Yield
			Years 1-5	Years 6-10	Years 11-15	Years 16-20	
Restricted	Gas Tax Increase	\$0.05 in Year 1	\$561.6	\$556.5	\$534.6	\$519.7	\$2,172.4
		additional \$0.04 in Year 4	\$179.6	\$445.2	\$427.7	\$415.7	\$1,468.2
		additional \$0.02 in Year 9		\$87.9	\$213.8	\$207.9	\$509.6
		additional \$0.02 in Year 14			\$84.6	\$207.9	\$292.5
		Subtotal	\$741.2	\$1,089.7	\$1,260.7	\$1,351.1	\$4,442.7
	Use Fuel Tax Increase	\$0.05 in Year 1	\$153.1	\$154.2	\$148.5	\$144.2	\$600.1
		additional \$0.04 in Year 4	\$49.2	\$123.4	\$118.8	\$115.4	\$406.8
		additional \$0.02 in Year 9		\$24.4	\$59.4	\$57.7	\$141.5
		additional \$0.02 in Year 14			\$23.5	\$57.7	\$81.2
		Subtotal	\$202.4	\$302.1	\$350.2	\$375.0	\$1,229.6
	Subtotal Restricted to Roadway Use		\$943.6	\$1,391.8	\$1,610.8	\$1,726.1	\$5,672.3
Unrestricted	Sales Tax Increase	0.25% in Year 1	\$1,006.9	\$1,153.8	\$1,279.5	\$1,435.7	\$4,875.9
		additional 0.50% in Year 5	\$426.5	\$2,307.7	\$2,559.0	\$2,871.4	\$8,164.6
		Subtotal	\$1,433.4	\$3,461.5	\$3,838.5	\$4,307.1	\$13,040.5
	Development Fees	beginning in Year 2	\$420.1	\$456.8	\$378.5	\$317.1	\$1,572.6
Subtotal Unrestricted Use			\$1,853.5	\$3,918.3	\$4,217.0	\$4,624.3	\$14,613.1
Total			\$2,797.1	\$5,310.1	\$5,827.8	\$6,350.4	\$20,285.4

The revenue target is approximately \$20 billion (in constant 2000 dollars) over the next 20 years. Anticipated revenue yields are depicted for each phased-in increase for each five-year period. The uncertainty of when changes may be initiated is reflected in the use of “Year 1, Year 2, etc” as opposed to actual dates. It is recognized that the earliest any change could occur is FY 2002.

FUEL TAXES

Tables 4 and 5 reflect information from a survey of state and local fuel tax rates in effect in January, 2000. At that time, Arizona ranked 40th in the nation in gas taxes and 8th in use fuel (diesel) taxes. Although Arizona’s existing per gallon state gas tax has not changed (it is \$0.18), the use fuel tax has been reduced since January, 2000 by one-cent to \$0.26 per gallon. A revised ranking would put Arizona 10th for diesel taxes.

Other states are reviewing their transportation revenue outlook and adjusting fuel taxes accordingly. However, assuming no changes by other states, the initial \$0.05 fuel tax increase suggested for Year 1 would result in Arizona moving up in the rankings to 19th and 1st for gas and use fuel taxes, respectively. It is noted that in January, 2000 Nevada ranked first in state and local gas taxes with \$0.33 and Pennsylvania ranked first in state and local diesel taxes with \$0.308 per gallon.

Table 4 2000 Gasoline Tax Rates (Cents per Gallon)

STATE	STATE GASOLINE TAX			LOCAL TAX	TOTAL	RANK
	Basic Tax	Sales Tax	Subtotal			
Nevada	24.0		24.0	9.0	33.0	1
Connecticut	32.0		32.0		32.0	2
New York	21.4	5.0	26.4	5.0	31.4	3
Maine	22.0	7.0	29.0		29.0	4
Rhode Island	29.0		29.0		29.0	4
Wisconsin	28.8		28.8		28.8	6
Illinois	19.0	8.0	27.0	1.0	28.0	7
Montana	27.8		27.8		27.8	8
California	18.0	9.0	27.0		27.0	9
Michigan	19.0	8.0	27.0		27.0	9
Florida	15.5		15.5	11.1	26.6	11
Pennsylvania	25.9		25.9		25.9	12
West Virginia	20.5	4.8	25.3		25.3	13
Idaho	25.0		25.0		25.0	14
Utah	24.5		24.5		24.5	15
Oregon	24.0		24.0		24.0	16
Nebraska	23.9		23.9		23.9	17
Maryland	23.5		23.5		23.5	18
Alabama	18.0		18.0	5.0	23.0	19
Delaware	23.0		23.0		23.0	19
Washington	23.0		23.0		23.0	19
Colorado	22.0		22.0		22.0	22
North Carolina	22.0		22.0		22.0	22
Ohio	22.0		22.0		22.0	22
South Dakota	22.0		22.0		22.0	22
Tennessee	21.4		21.4		21.4	26
Hawaii	16.0	5.0	21.0		21.0	27
Massachusetts	21.0		21.0		21.0	27
North Dakota	21.0		21.0		21.0	27
Iowa	20.0		20.0		20.0	30
Kansas	20.0		20.0		20.0	30
Louisiana	20.0		20.0		20.0	30
Minnesota	20.0		20.0		20.0	30
Texas	20.0		20.0		20.0	30
Vermont	20.0		20.0		20.0	30
Arkansas	19.6		19.6		19.6	36
New Hampshire	19.6		19.6		19.6	36
Indiana	15.0	4.5	19.5		19.5	38
New Mexico	18.5		18.5		18.5	39
Arizona	18.0		18.0		18.0	40
Mississippi	18.0		18.0		18.0	40
Virginia	17.5		17.5		17.5	42
Missouri	17.0		17.0		17.0	43
Oklahoma	17.0		17.0		17.0	43
Georgia	7.5	6.5	14.0	2.6	16.6	45
Kentucky	16.4		16.4		16.4	46
South Carolina	16.0		16.0		16.0	47
Wyoming	15.0		15.0		15.0	48
New Jersey	14.5		14.5		14.5	49
Alaska	8.0		8.0	6.0	14.0	50
AVERAGE	20.3		21.4		22.2	

Arizona and bordering states are highlighted for reference

Table 5 2000 Diesel Tax Rates (Cents per Gallon)

STATE	STATE DIESEL TAX			LOCAL TAX	TOTAL	RANK
	Basic Tax	Sales Tax	Subtotal			
Pennsylvania	30.8		30.8		30.8	1
Illinois	21.5	8.0	29.5	1.0	30.5	2
Maine	23.0	7.0	30.0		30.0	3
New York	19.7	5.0	24.7	5.0	29.7	4
Rhode Island	29.0		29.0		29.0	5
Wisconsin	28.8		28.8		28.8	6
Montana	28.3		28.3		28.3	7
Arizona	27.0		27.0		27.0	8
California	18.0	9.0	27.0		27.0	8
Nevada	27.0		27.0		27.0	8
West Virginia	20.5	4.9	25.4		25.4	11
Idaho	25.0		25.0		25.0	12
Ohio	25.0		25.0		25.0	12
Utah	24.5		24.5		24.5	14
Maryland	24.3		24.3		24.3	15
Alabama	19.0		19.0	5.0	24.0	16
Oregon	24.0		24.0		24.0	16
Nebraska	23.9		23.9		23.9	18
Michigan	15.0	8.0	23.0		23.0	19
Washington	23.0		23.0		23.0	19
Iowa	22.5		22.5		22.5	21
Delaware	22.0		22.0		22.0	22
Indiana	16.0	6.0	22.0		22.0	22
Kansas	22.0		22.0		22.0	22
North Carolina	22.0		22.0		22.0	22
South Dakota	22.0		22.0		22.0	22
Hawaii	16.0	5.0	21.0		21.0	27
Massachusetts	21.0		21.0		21.0	27
North Dakota	21.0		21.0		21.0	27
Arkansas	20.6		20.6		20.6	30
Colorado	20.5		20.5		20.5	31
Louisiana	20.0		20.0		20.0	32
Minnesota	20.0		20.0		20.0	32
Texas	20.0		20.0		20.0	32
New Hampshire	19.6		19.6		19.6	35
New Mexico	19.5		19.5		19.5	36
Wyoming	15.0	4.0	19.0		19.0	37
Tennessee	18.4		18.4		18.4	38
Connecticut	18.0		18.0		18.0	39
Mississippi	18.0		18.0		18.0	39
New Jersey	17.5		17.5		17.5	41
Missouri	17.0		17.0		17.0	42
Vermont	17.0		17.0		17.0	42
Georgia	7.5	6.6	14.1	2.6	16.7	44
South Carolina	16.0		16.0		16.0	45
Virginia	16.0		16.0		16.0	45
Florida	15.4		15.4		15.4	47
Alaska	8.0		8.0	7.0	15.0	48
Oklahoma	14.0		14.0		14.0	49
Kentucky	13.4		13.4		13.4	50
AVERAGE	20.3		21.5		21.9	

Arizona and bordering states are highlighted for reference

It is likely that many states will be making adjustments in the future. Therefore, no comparison is made on how Arizona's ranking would change beyond the suggested Year 1 increase. Figure 1 illustrates how Arizona ranked in 2000 and how it would compare with a \$0.05 fuel tax increase.

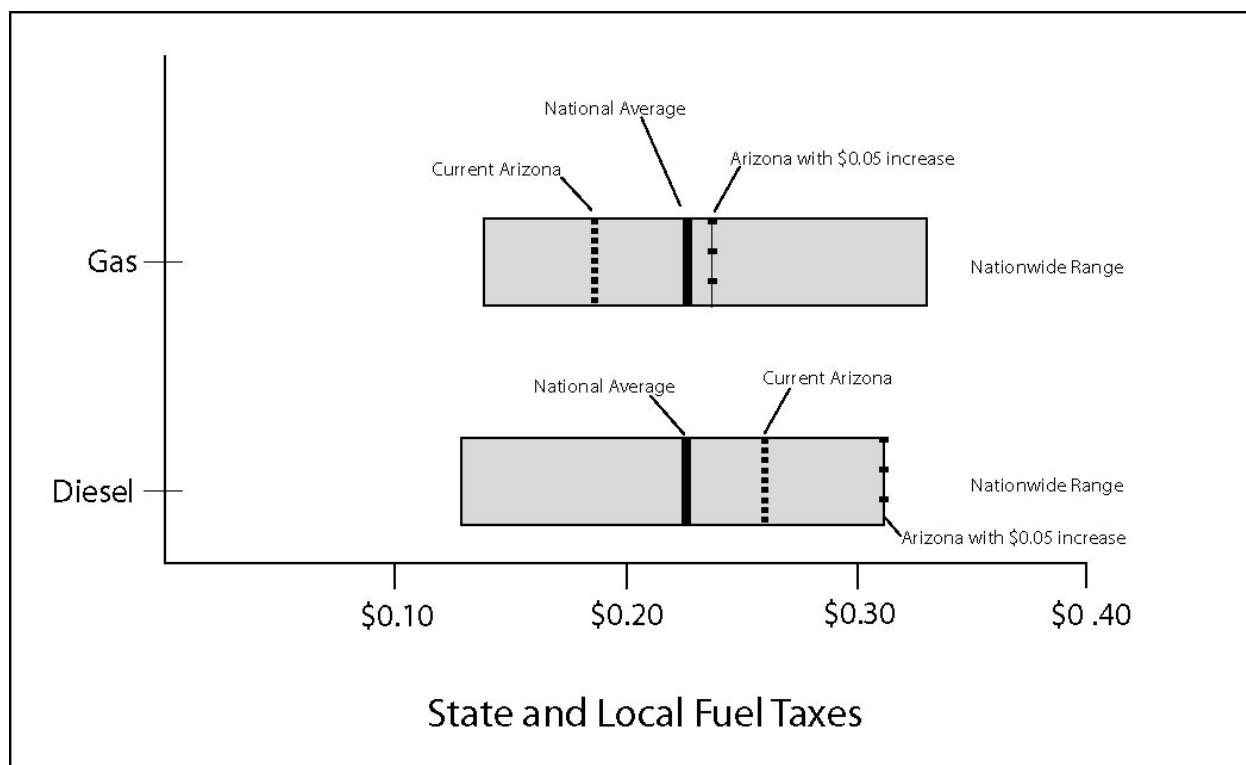


Figure 1
ARIZONA'S RANKING IN FUEL TAXES

STATEWIDE SALES TAX

The statewide sales tax surcharge is proposed to be phased-in, beginning with an 0.25% surcharge for transportation in Year 1. An additional 0.5% surcharge is proposed in Year 5 to coincide with the expiration of the Maricopa County Regional Area Road Fund (RARF) tax.

DEVELOPMENT FEES

The suggested revenue plan also includes a statewide development fee. The revenue potential for such a fee was estimated using new housing starts. It was estimated that the equivalent of a \$1,000 fee for each new residential development would generate on average \$87.2 million per year. A lesser fee applied to both residential and commercial developments could be used to yield equivalent revenue levels. It is noted that the legal framework for a statewide development fee has to be developed.

OTHER CONSIDERATIONS

The forecasts of both needs and revenues are based on many assumptions, including population increases, vehicle usage, fuel consumption, inflation rates, disposable income, and other related factors. The long-range 20-year planning horizon adds another dimension to the forecasts. As a result, the suggested revenue plan should be viewed as a blueprint for moving into the future, with adaptations necessary if underlying assumptions change.

There are other alternative revenue sources that could be considered if it becomes necessary to supplement the revenue generated by the primary revenue sources (i.e. fuel tax increases and the statewide sales tax surcharge). Examples include:

- **alternative fuel tax:** the effectiveness of the gas tax may be eroded by the switch to alternative fuels, therefore consideration should be given to taxing alternative fuel sources;
- **sales tax on automobiles:** Arizona has a sales tax on automobiles and the revenue is deposited in the State General Fund. All or a portion of this revenue source could be dedicated to transportation. This would not be a tax increase, but the reallocation of revenues from unspecified use to dedicated transportation use;
- **parking tax:** other municipalities have added a parking tax with the proceeds dedicated to transportation. This source not only generates revenue, but also is an incentive for considering ridesharing or transit usage;
- **public/private partnerships:** there are mechanisms for financing specific projects that involve public/private partnerships. Toll roads are one example. Opportunities for public/private partnerships should be explored on a case-by-case basis; and
- **miscellaneous:** examples of other actions raised by the Task Force include a tax on all property transfers and fuel tax indexing.

KEY IMPACTS

Key impacts of the suggested revenue plan will be the increased tax burden to operate vehicles (that is, the additional amount spent in fuel taxes) and the additional sales tax burden. For the purpose of this assessment, a two-car household with a \$40,000 household income is used. It is assumed that 25%, or \$10,000, is spent on taxable items.

Table 6 summarizes the impact of each individual tax action as well as the total annual impact by period. The initial \$0.05 increase in state gas tax will result in \$65 more in annual state gas tax payments. The 0.75% sales tax surcharge is expected to have a household impact of \$75 annually.

Table 6 Key Impacts of Suggested Revenue Plan

Action	Additional Payment for Average Household		
	Gas Tax	Sales Tax	Total
\$0.05 increase in Year 1	\$65		\$65
\$0.04 increase in Year 4	\$52		\$52
0.25% surcharge in Year 1		\$25	\$25
0.50% surcharge in Year 5 *		\$50	\$50
Subtotal Annual Impact By End of Year 5	\$117	\$75	\$192
\$0.02 increase in Year 9	\$26		\$26
Subtotal Annual Impact By End of Year 10	\$26	\$0	\$26
\$0.02 increase in Year 14	\$26		\$26
Subtotal Annual Impact By End of Year 15	\$26	\$0	\$26
Total Final Annual Impact	\$169	\$75	\$244
* not an increase for Maricopa County since this replaces expired RARF tax Note 1: Gas tax impacts assume two cars, each driven on average 12,000 miles per year with average of 18.5 mpg Note 2: Impacts are for household with \$40,000 average income, \$10,000 spent on taxable items			

SUMMARY

The suggested revenue plan is a balanced, phased-in approach to generating additional revenue. Gradual increases over a 15-year period in the existing state fuel taxes and state sales tax, coupled with revenue from a development fee, can generate the \$20 billion of additional revenue required to meet Arizona's transportation needs.

Reliance on the traditional transportation revenue source – the gas tax – is reduced with the addition of a new source – a sales tax surcharge. The sales tax surcharge has the benefits of generating substantial revenue, being responsive to inflation, and being flexible in where the revenue can be spent.